

CLAIMS

1. A refrigerant composition which comprises:
 - (a) pentafluoroethane, trifluoromethoxydifluoromethane or hexafluoro-
5 cyclopropane, or a mixture of two or more thereof, in an amount of from 60 to 70% by weight based on the weight of the composition,
 - (b) 1,1,1,2- or 1,1,2,2-tetrafluoroethane, trifluoromethoxypentafluoroethane, 1,1,1,2,3,3,3-heptafluoropropane or a mixture of two or more thereof, in an amount of
10 from 26 to 36% by weight based on the weight of the composition and
 - (c) an ethylenically unsaturated or saturated hydrocarbon, optionally containing one or more oxygen atoms, with a boiling point from -12°C to +10°C, or a mixture thereof, or a mixture of one or more said hydrocarbons with one or more other hydrocarbons, said mixture having a bubble point from -12°C to +10°C, in an amount
15 from 1% to 4% by weight based on the weight of the composition.
2. A composition according to claim 1 in which component (c) is present
in an amount from 3 to 4% by weight based on the weight of the composition.
3. A composition according to claim 2 in which component (c) is present
in an amount of about 3.5% by weight based on the weight of the composition.
4. A composition according to any one of claims 1 to 3 in which component
20 (c) is n-butane and/or isobutane.
5. A composition according to claim 4 in which component (c) is n-butane.
6. A composition according to any one of claims 1 to 3 in which component
(c) is a mixture of n-butane and/or isobutane with another hydrocarbon.
7. A composition according to any one of the preceding claims in which
25 component (a) is pentafluoroethane.
8. A composition according to any one of the preceding claims in which
component (a) is present in an amount from 62 to 67% by weight based on the weight
of the composition.
9. A composition according to claim 8 in which component (a) is present
30 in an amount above 64 up to 66% weight based on the weight of the composition.

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10. A composition according to any one of the preceding claims in which component (b) is 1,1,1,2-tetrafluoroethane.

11. A composition according to any one of the preceding claims in which component (b) is present in an amount from 28 to 32% by weight based on the weight of the composition.

12. A composition according to any one of the preceding claims in which the weight ratio of component (a): component (b) is at least 1.5:1.

13. A composition according to claim 12 in which the said weight ratio is 1.5:1 to 3:1.

14. A composition according to any one of the preceding claims which comprises, as component (a), 62 to 67% pentafluoroethane as component (d), 3 to 35% by weight based on the weight of the composition 1,1,1,2-tetrafluoroethane and as component (c), butane and/or isobutane, or a said mixture of hydrocarbons comprising butane and/or isobutane.

15. 15. A composition according to any one of the preceding claims which comprises a further component.

16. A composition according to claim 15 in which the further component is a hydrofluorocarbon.

17. A composition according to claim 16 in which the hydrofluorocarbon has a boiling point at atmospheric pressure of at most -40°C .

18. A composition according to claim 16 or 17 in which the F/H ratio in the hydrofluorocarbon is at least 1.

19. A composition according to claim 18 in which the hydrofluorocarbon is difluoromethane or trifluoromethane.

20. A composition according to any one of claims 15 to 19 in which the further component is present in an amount not exceeding 5% by weight based on the weight of (a), (b) and (c).

21. A composition according to claim 20 in which the further component is present in an amount not exceeding 2% by weight based on the weight of (a), (b) and (c).

22. A composition according to claim 1 substantially as hereinbefore defined.

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23. Use of a composition as claimed in any one of the preceding claims as a refrigerant in a refrigeration apparatus.

24. The process for producing refrigeration which comprises condensing a composition as claimed in any one of claims 1 to 22 and thereafter evaporating the composition in the vicinity of a body to be cooled.

25. A refrigeration apparatus containing, as refrigerant, a composition as claimed in any one of claims 1 to 22.